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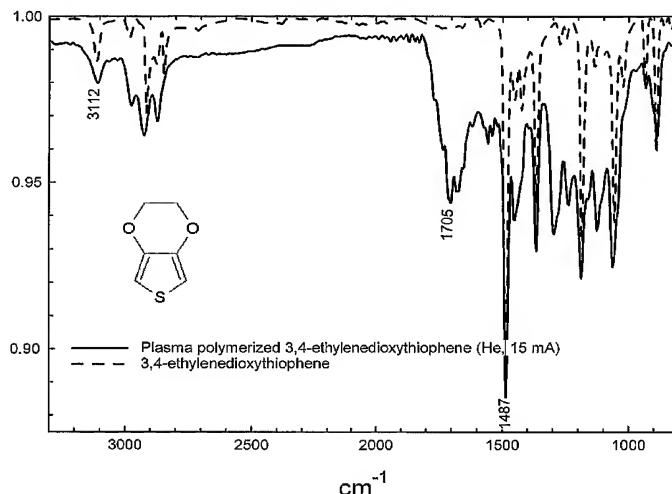
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(54) Title: PLASMA-POLYMERISATION OF POLYCYCLIC COMPOUNDS



(57) **Abstract:** The present invention relates to a method for the preparation of a layer of a plasma-polymerised material on the surface of a substrate, e.g. a substrate of a glass, an organosiloxane-based or polysiloxane-based material, silicon, fluoro-polymer (e.g. Teflon[®]), etc. The present invention also relates to novel objects and microstructured or micropatterned devices, e.g. by lift-off techniques, in particular such objects and devices that have layers of electrically conducting materials providing a conductivity of at least 0.01 S/cm. A feature of the invention is the plasma-polymerization of a compound including at least one polycyclic compound, said polycyclic compounds comprising a non-aromatic heterocyclic fused to an aromatic or heteroaromatic ring or ring system. Examples of such compounds are 3,4-ethylenedioxothiophene (EDT), forming layers of poly(ethylenedioxothiophene) (PEDT), and piperonylamine, piperonyloyl chloride, safrole, 3,4-ethylenedioxypyrrrole, 3,4-ethylenedioxo-N-methylpyrrole, and 3,4-methylenedioxothiophene.

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